landmask question in LIS5 ...

jonc 33 posts since

Sep 20, 2007 Dear LIS users,

I am confused by some output I'm seeing in the LIS landmask. In the file core/param_module.F90, subroutine writelandmask, there is a small bit of code to output the land-sea mask in the parameter binary output. When viewing the array in GrADS, I see a unform field of "1" with (what seems to be) undefined values for water points. The block of code in that subroutine is:

```
temp = lis%udef
do t=1,lis%nch(n)
if(lisdom(n)%tile(t)%index.ne.-1) then
temp(t) = 1.0
endif
enddo

call drv_writevar_bin(ftn,n,temp)
```

I would like to output this same landmask in the GRIB output routine in src/lsms/noah2.7.1/noah_gribout.F90, so I added the following code at the end of the "Evaporation components" section of that file:

```
call grib1_finalize(GRIB_LANDMASK,gribobj(n)%sect1,time_unit,0,0,1)
temp = lis%udef
do t=1,lis%nch(n)
if(lisdom(n)%tile(t)%index.ne.-1) then
temp(t) = 1.0
endif
enddo

call drv_writevar_grib(ftn,ftn_stats,n,1, &
temp, &
"LandMask(1/0)",2, &
toplev0, botlev0, 1)
```

When I examine the contents of the GRIB file, however, ALL grid points have a value of "1". In fact, the "temp" array in the block of code has all values of "1", when I test wrote the array to an output file. So, it seems that there is no distinction in the land-sea grid points at this part of the code.

Is there something I'm missing or not doing correctly in order to properly output the land-sea mask?

Thanks,

Jon Tags: lis, landmask

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sujay *118 posts since*
Sep 20, 2007 1. **Re: landmask question in LIS5** Sep 15, 2008 3:02 PM

Jon,

Are you running with the INC_WATER_PTS turned on? If yes, the water points are included in the computations, which means the landmask is 1 everywhere.

-S